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Nuremberg lamentation: for the forgotten victims of medical science

William E Seidelman

Fifty years after the Nuremberg medical trial there remain many unanswered questions about the role of the German medical profession during the Third Reich. Other than the question of human experimentation, important ethical challenges arising from medicine in Nazi Germany which have continuing relevance were not addressed at Nuremberg. The underlying moral question is that of the exercise of professional power and its impact on vulnerable people seeking medical care. Sensitisation to the obligations of professional power may be achieved by an annual commemoration and lament to the memory of the victims of medical abuse which would serve as a recurring reminder of the physician's vulnerability and fallibility.

The Nuremberg medical trial saw the prosecution of a few people who exploited the opportunities when medical science defined some human beings as "subhuman" and therefore qualified as subjects for inhuman medical experiments. Absent from the dock were the leaders of

the medical profession of the Third Reich, in particular the academic and scientific elite. It was this elite who legitimised the devaluation of human life and set the stage for medical crimes—crimes in which leading academics and scientists were either principals or accomplices. Of the 23 defendants at the Nuremberg medical trial, only Gerhard Rose (sentenced to life imprisonment) and Paul Rostock (acquitted) were internationally recognised scientists and academics (fig 1).¹⁻³

Doctors as "selectors"

The operant paradigm of medical practice during the Hitler period was that of the physician as a "selector" acting on behalf of the state in order to improve the health of the nation (Volksgesundheit). Having defined people as an underclass or a risk to the genetic or racial health of the population, medical science deemed the so called "inferiors" to be appropriate "subjects" who could be selected for enforced sterilisation, incarceration, and eventually extermination. The "euthanasia" programmes of organised murder began in medicine and ultimately led to the programme of mass extermination in the death camps of German occupied Poland.⁴

The professional and scientific context of the day promoted eugenic and racist ideas within the framework of the academic milieu and curriculum of the medical and scientific community. Eugenics and race hygiene were compulsory subjects taught in some of the foremost medical schools in the world. Special courses were also established for practising physicians.⁵⁻⁷ Research on eugenics and racial hygiene was conducted in university research institutes and those of the Kaiser-Wilhelm organisation.^{7,8} Many academic and scientific institutions which contributed to the evils of the Third Reich were the same organisations which had earlier helped give birth to modern medical science and medical education.⁹

Having defined the victims, science had created its own research subjects. The helpless human quarry incarcerated by the state was viewed by medical science as a unique opportunity for the kinds of research which under German law were not permitted even on animals.¹⁰ These people were exploited before death for inhuman research, and their bodies were exploited after death (fig 2).

State misuse of professional power

Though the Nuremberg code has had a profound impact on human experimentation, the broader

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Fig 1—German doctors and scientists in the dock at Nuremberg, 12 December 1946. Paul Rostock is in the front row, third from left; Gerhard Rose is in the back row, first on left

questions and challenges arising from medicine during the Hitler period have not received the full and sustained consideration they deserve. The issues include:

- The relationship of the physician to the state
- The inherent conflict between caring for the individual as opposed to the health of the population
- The role of the physician in deciding which genetically determined human characteristics are desirable or undesirable
- Euthanasia and physician assisted suicide
- The impact of political and economic pressures on the moral conscience of the medical profession
- The role of the physician in the differential selection of human beings for treatment (or refusal of treatment)
- The role of the physician-teacher and physician-scientist as a vehicle of political and social change
- The conscience of the medical profession in the face of institutional brutality.

The underlying moral question is how the exercise of professional power may affect vulnerable people who seek care, cure, and compassion from physicians and the healthcare system. Framing the response to this question over time is the moral responsibility of leadership.

Complicating the question is the role of the state in the exercise of that power. The past century has seen the expansion of the domain of the state in health care from that of public health and quarantine in the nineteenth century to influencing or controlling the very delivery of health services today. The Hitler era represents a crisis of the relationship between the physician and the state. Of all German occupational groups, physicians had the largest representation in the Nazi party.^{3 11} The medical profession enhanced the racial and eugenic policies of the Nazi party and government and was itself subjugated by the party and the state.⁵ Despite the professional crisis exemplified by the experience of the Third Reich, the past 50 years have seen the enhancement of the power of the state in health care and the exercise of that power through fiscal control.¹² The relationship between the profession and the state has become increasingly intertwined and interdependent,

encompassing payment for health services, distribution of resources, and support for education and research.

The five decades since Nuremberg have seen within medicine and science repeated examples of the ethical challenges of definition and selection as well as those of exploitation of vulnerable people. There have been recurring instances of medical science contravening the Nuremberg code and exploiting vulnerable people for medical experimentation, including patients, prisoners, visible minorities, children in institutions, women, and soldiers.¹³⁻²¹ Developments in biotechnology have accentuated the physician's role as "selector" on the basis of genotype or phenotype. Economic trends and indicators also exert great influence.

Fiscal pressures and lack of ethics to curb power

In poor and rich countries physicians participate in structures of social choice and access to health care that variously blunt or sharpen the ethical issues in selection. The debate among physicians in the developed world is now becoming particularly intense as business and government try to reduce the costs of health care. The emphasis of medical practice is shifting from the health of the individual patient to the health of the population (the new Volksgesundheit?). In response to economic pressures the phenomenon of "managed care" is occurring as a consequence of state policy in countries with government sponsored universal health insurance (for example, the United Kingdom and Canada) and in the marketplace of the United States, in which the private sector plays a major part.

To serve as a guide in these current circumstances physicians and patients can find no developed ethical examination of professional power and its limits except as professional action relates to human experimentation. This absence may in part be explained by the lack of accounting of the role of professors and scientists in the medical crimes of the Hitler era. This omission was explained by Kater as being a consequence of "the German medical tradition of arch-conservatism, closed-caste mentality, and selfishness to the point of shunning broader issues of social and general healthcare. . . ." The postwar response of the German academic and medical community has seen repeated examples of suppression and intimidation towards those who have attempted a critical examination of medicine during the Hitler period.^{3 22 23}

Naming names: Nazi academics and scientists

Listed below are examples of powerful academics and scientists during the Third Reich.

- The neuropathologist Professor Dr Julius Hallervorden (1882-1965), director of the Kaiser-Wilhelm Institute of Psychiatry of Berlin-Buch. Hallervorden exploited the euthanasia programme to collect the brains of victims for his neuropathological collection.^{8 24 25}
- The anatomist Professor Dr Eduard Pernkopf (1888-1955), of the University of Vienna. As dean of the Vienna medical faculty Pernkopf led the purge of the Jewish faculty.²⁶ Pernkopf exploited Nazi terror to acquire specimens for his institute of anatomy.²⁷ The founding editor of a renowned textbook of anatomy, which continues to be published, Pernkopf included in the original editions paintings with Nazi icons (swastika and SS symbols) incorporated in the artists' signatures.²⁸⁻³¹ In a current edition two paintings by Entresser still incorporate these icons, though in all other paintings they have been removed.³¹ Some of the subjects portrayed in the Pernkopf text may have been the victims of Nazi terror (fig 3).²⁶
- The psychiatrist-geneticist Professor Dr Ernst Rüdin (1874-1952), director of the Kaiser-Wilhelm Institute of Psychiatry of Munich. Rüdin was a leader of the Nazi

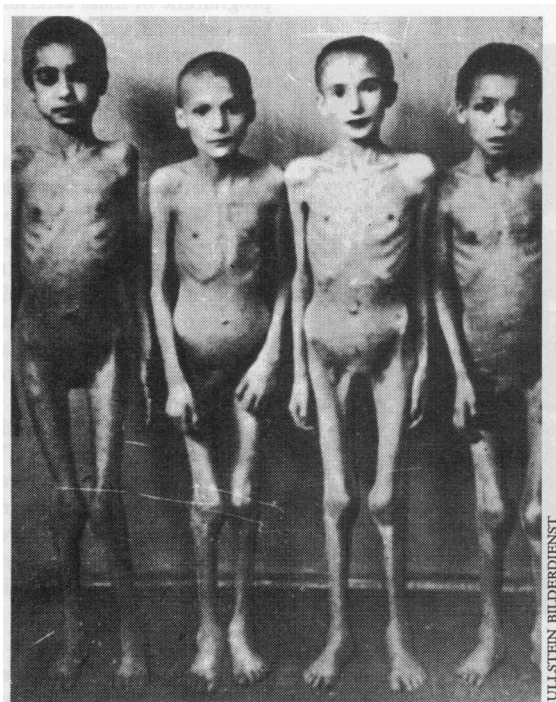


Fig 2—Experimental subjects of Josef Mengele, Auschwitz



Fig 3—Professor Eduard Pernkopf (second from right) at a conference at the University of Vienna in 1944

eugenics programme and a principal architect of the programme of enforced sterilisation.^{8 32 33}

- The psychiatrist Professor Dr Karl Schneider (1891-1946), professor and chairman of the department of psychiatry of the University of Heidelberg. Schneider exploited the euthanasia programme for his own research, including the study of victims before their murder and the dissection of their brains after.³⁴
- The gynaecological anatomist Professor Dr Hermann Stieve (1886-1952), of the University of Berlin and the Berlin Charité Hospital. Stieve is known to have exploited women prisoners for his studies on the effect of mental stress on the menstrual cycle. The mental stress was the women's own impending execution. On the women's execution Stieve had their pelvic organs removed for study.³⁵
- The geneticist Professor Dr Otmar von Verschuer (1896-1969), director of the University Institute of Genetics of the University of Frankfurt and the Kaiser-Wilhelm Institute of Anthropology of Berlin-Dahlem. An internationally renowned expert on twin studies, Verschuer was the principal investigator in the experiments of Dr Joseph Mengele at Auschwitz (fig 4).^{8 36}
- The anatomist Professor Dr Hermann Voss (1894-1987), of the Reich University of Pozen. Voss used the bodies of executed Gestapo victims for his dissection classes and sold the skeletal remains for profit.³⁵

POSTWAR CAREERS

None of these people was ever prosecuted. Professor Karl Schneider committed suicide in 1946. Though Pernkopf was incarcerated after the war, he was never indicted and was permitted to resume working on his anatomical text.²⁸ Professor Julius Hallervorden, together with his colleague Professor Hugo Spatz, is memorialised in the eponym for a congenital neurological condition—Hallervorden-Spatz disease. Hallervorden's biography is included in a 1990 anthology of the founders of child neurology.^{25 37}

Rüdin's work on the genetics of schizophrenia, which established a theoretical basis for his eugenics work, continues to be cited in psychiatric genetics without reference to his eugenics career.³⁸⁻⁴⁰ Professor Hermann Stieve was honoured after the war by the Berlin Charité Hospital with a bust and a lecture hall dedicated in his name. After the war Verschuer became professor and head of genetics at the University of Münster, where he trained many of the postwar leaders in genetics in Germany.^{8 36} Voss had a distinguished postwar career.

Together with his Posen colleague Robert Herrlinger he coauthored a textbook of anatomy, *Taschenbuch der Anatomie*, which was considered a standard work³⁵ and was published until the 1990s.

The careers of these professors stand in stark contrast with the fate of their victims. Remains of some of the victims continued to be held in the collections of anatomical and research institutes for over four decades after the war.⁴¹ Others have never been properly accounted for and may still be in use today.³⁵ In March 1995 the Israel Holocaust Martyrs and Heroes Remembrance Authority, Yad Vashem, made a formal request of the universities of Vienna (letter from A R Dafni, vice chairman of Yad Vashem, to Professor Dr Alfred Abenauer, rector of the University of Vienna, 23 March 1995) and Innsbruck (letter from A R Dafni to Professor Dr Hans Moser, rector of the University of Innsbruck, 23 March 1995) for an independent inquiry to determine the origins of the subjects portrayed in Pernkopf's anatomical textbook.

Legacies of Nazism: the World Medical Association

The legacy of Nazism is not confined to the mortal remains of the victims or possibly paintings in an anatomical text. A continuing victim may be the Nuremberg code itself. A substantial blow to the Nuremberg code was delivered by the World Medical Association, which has enunciated the Helsinki declarations on human experimentation.⁴² Under the Helsinki declarations the rigid requirement of Nuremberg for respect for persons is softened, and the requirement of informed consent is differentiated between therapeutic and non-therapeutic clinical research. Grodin *et al* believed that "The Declaration of Helsinki . . . undermined the primacy of subject consent in the Nuremberg code and replaced it with the paternalistic values of the traditional doctor-patient relationship."⁴³ As explained by Florkin (cited by Refsauge), Helsinki modified Nuremberg because the World Medical Association considered the Nuremberg code as applying to Nazi crimes with the World Medical Association declarations correcting that "error."⁴⁴ Another

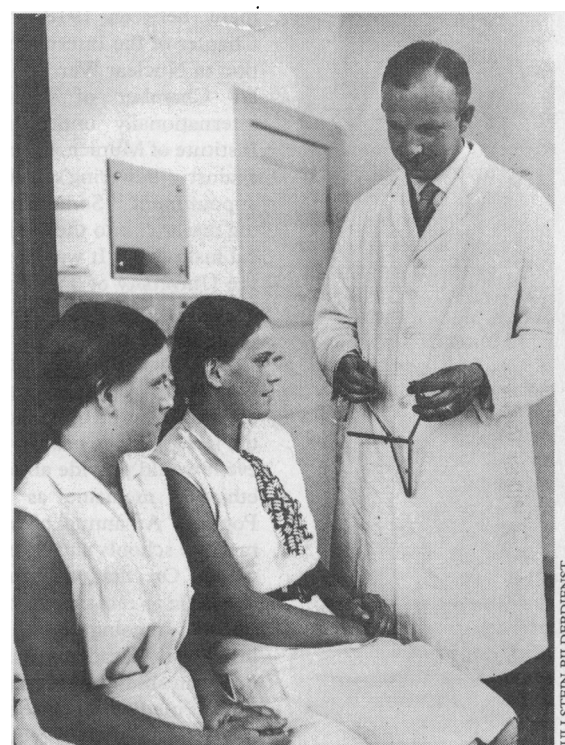


Fig 4—Professor Dr Otmar von Verschuer, conducting twin studies at the Kaiser-Wilhelm Institute, Berlin, in 1930

possible explanation is that the World Medical Association itself has been compromised by its own Nazi legacy.

The leadership of the World Medical Association has, in fact, included physicians with direct links to the very organisations responsible for the horrors which brought about the enunciation of the Nuremberg code. The president of the World Medical Association for 1973-4 was Dr Ernst Fromm (b 1917), of Hamburg, who had been a member of the SA (Nazi stormtroops) and SS terror organisations.^{22 45} In 1992 the World Medical Association appointed as president elect for 1993-4 Professor Dr Hans Joachim Sewering (b 1916), of Dachau. During the Hitler period Sewering was a member of the Nazi party and the SS, and he has been linked with the death of a 14 year old girl, Babette Fröwis. In October 1943, on Sewering's order, Babette Fröwis was sent from an institution for handicapped children where Sewering worked to the killing centre at Eglfing-Haar. Sewering was the German medical profession's representative to the World Medical Association from 1968 and in 1973 was appointed treasurer of the association.^{3 22 46 47} He was forced to step aside in January 1993 when his past was revealed outside Germany.^{48 49}

Remembering the lessons of the past

Half a century after Nuremberg it is opportune to go back to the beginning and examine how the best and the brightest people in medical science could become parties to evil. Physicians need to examine the historical, social, and legal basis of their profound powers and influence, including the tragic example of the exploitation and abuse of those powers by the foremost medical and research communities of the day. The medical profession needs to examine what can happen when medicine is influenced by political ideology.

Examples of such an examination are coming from within the German medical community. Individual physicians⁵⁰ and medical organisations have taken the initiative in probing the tragic history of the medical profession in their own country. The organisations include the Berlin Chamber of Physicians, which organised a major exhibit on the history of medicine in Germany between 1918 and 1945,⁵¹ and the German Chapter of the International Physicians for the Prevention of Nuclear War. An English translation of the Berlin Chamber of Physicians' exhibit was shown internationally under the auspices of the Goethe Institute of Munich. German doctors publicly protested against Sewering's World Medical Association appointment.⁵² Some German universities are supporting research into the subject at university based historical institutes.²² It was the efforts of medical students at the University of Tübingen which resulted in a formal inquiry into the origins of pathoanatomical specimens from the Hitler era in the collections of that university.⁵³

In July 1990, at the burial of the Tübingen specimens, Professor Jürgen Peiffer called for an annual commemoration of faculty and students together so that the lessons of the past would not be forgotten.⁵⁴ Such an event would provide an opportunity to enunciate a new ethic in medicine as proposed by McIntyre and Popper.⁵⁵ An annual commemoration should be held in medical schools and research institutes throughout the world. On that day the medical profession would assemble to remember and to reflect on its responsibilities and ongoing challenges, in particular the role and influence of academics and scientists in medicine. The occasion should include a lament for the fate of the victims of medical abuse. Sensitisation of the profession to its moral obligations requires an accounting of who the victims were and how, why, and by whom they came to be selected. In the spirit of McIntyre and Popper, the

Key messages

- The Nuremberg medical trial failed to address the role of the academic and scientific elite during the Third Reich
- The operant paradigm of medical practice in Nazi Germany was that of the physician as "selector," on behalf of the state, of people defined as inferior
- Other than the question of human experimentation, the medical trial did not address important questions which continue to have relevance today
- There should be an annual commemoration on the anniversary of the Nuremberg medical trial, which would serve as a lament for the victims of medical abuse and as a recurring reminder to physicians that they are vulnerable human beings who can make mistakes

event would serve as a recurring reminder that the physician is a vulnerable and fallible human being and that no individual or institution, no matter how powerful or prestigious, is inflexible. An appropriate date for such an occasion would be the anniversary of the commencement of the Nuremberg medical trial—9 December 1946—the second Monday in December.

Two such commemorations are to be held this year. The first took place during 26-29 October in Nuremberg itself under the sponsorship of the German Chapter of the International Physicians for the Prevention of Nuclear War. The second will be in Washington, DC, during 8-10 December at the conference, "The Nuremberg code and human rights: 50th anniversary of the doctors' trial," to be held at the United States Holocaust Memorial Museum. Material in this paper was presented at the commemoration in Nuremberg and will be presented again at the commemoration in Washington.

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Human guinea pigs and the ethics of experimentation: the *BMJ*'s correspondent at the Nuremberg medical trial

Paul Weindling

Though the Nuremberg medical trial was a United States military tribunal, British forensic pathologists supplied extensive evidence for the trial. The *BMJ* had a correspondent at the trial, and he endorsed a utilitarian legitimization of clinical experiments, justifying the medical research carried out under Nazism as of long term scientific benefit despite the human costs. The British supported an international medical commission to evaluate the ethics and scientific quality of German research. Medical opinions differed over whether German medical atrocities should be given publicity or treated in confidence. The *BMJ*'s correspondent warned against medical researchers being taken over by a totalitarian state, and these arguments were used to oppose the NHS and any state control over medical research.

Shortly after the close of the second world war Kenneth Mellanby, reader in medical entomology at the London School of Hygiene and Tropical Medicine, determined to "rescue the records" of German medical research during the Nazi era for evaluation by British scientists. In the period leading up to the Nuremberg medical trial in December 1946, however, visits to Germany were strictly controlled and the only way to gain entry was as a bona fide medical reporter. To this end Mellanby approached Hugh Clegg, editor of the *BMJ*, with the offer of articles on German human experiments and Clegg appointed him as the *BMJ*'s first ever foreign

correspondent. When the prosecution opened proceedings in Nuremberg on 9 December Mellanby joined the ranks of medical reporters from Germany, France, Belgium, and other nations.¹ Despite Mellanby's later claims to have brought German experimental records back to Britain none of these has ever been identified.

Confidential evaluation of human experiments

The first trial of major German war criminals at Nuremberg was an international military tribunal of the four allies, Britain, France, Russia, and the United States. By contrast, the medical trial was constituted solely as a United States military tribunal, organised and paid for by the United States. Behind the scenes, however, there was considerable liaison between British army and United States medical war crimes investigators. British medical authority was represented by the forensic pathologists Professor Sydney Smith and Major Keith Mant. At a meeting with French and United States counterparts at the Hoechst pharmaceutical offices in May 1946 these investigators assembled crucial evidence on German medical atrocities. The British handed over a group of German medical captives for trial, and in November 1946 Major Mant briefed the United States prosecution's medical expert, the neurologist and Austrian emigre Professor Leo Alexander.^{2,3} The British came round to the view that medical scientists were best qualified to evaluate human experiments as an expert tribunal in closed session. Thus whereas the trial made German medical research publicly accountable to international justice, the British plumped for confidential evaluation by professional peers.

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